PROPOSAL EVALUATION

Proposition 1E Integrated Regional Water Management (IRWM) Grant Program Stormwater Flood Management Grant, Round 2, 2013

| Applicant City of Calimesa | Amount Requested | \$1,930,000 |
|---|---------------------|-------------|
| Proposal Title Calimesa Creek Flood Control and Aquifer Recharge Project | Total Proposal Cost | \$3,871,818 |

PROJECT SUMMARY

The project includes three components: (1) the creation of a 19 acre-feet (AF) detention basin, (2) channel rehabilitation and related improvements, and (3) conveyance facilities for storm water systems. The basin will attenuate storm flows and provide a constant water source for an existing creek. The channel improvements include the widening of the existing creek, construction of stream bed alteration and channel walls to reduce the water flow rate. A concrete lined storm drain will be constructed below the creek bed to convey storm flows and provide 100-year storm protection to the City Hall and Fire Station serving as an emergency services facility.

PROPOSAL SCORE

| Criteria | Score/ Max. Possible | Criteria | Score/ Max. Possible |
|--|-------------------------|----------------------------------|-------------------------|
| Work Plan | 6/15 | Technical Justification | 4/10 |
| Budget | 2/5 | | , |
| Schedule | 2/5 | Benefits and Cost Analysis | 21/30 |
| Monitoring, Assessment, and Performance Measures | 2/5 | Program Preferences | 5/10 |
| | | Total Score (max. possible = 80) | 42 |

EVALUATION SUMMARY

WORK PLAN

The criterion is marginally addressed and documentation is incomplete and insufficient. Task descriptions lack adequate detail to determine if the work can be implemented as proposed. Under completed work, the applicant states that preliminary engineering for the design of the proposed improvements has commenced, but no additional detail is provided, making design status unclear. Construction details are vague and lack specific construction materials, equipment, and methods. Some of these details exist in the budget section but it is unclear why these values are not

explained in the work plan. A list of anticipated permits is provided, but the permit acquisition status is not. The applicant implies that the initial study has not been completed, but does not explicitly state the status of the environmental documentation. The work plan does not discuss how the proposal relates to the adopted Integrated Regional Water Management Plan (IRWMP) and does not address data management, as described in the IRWM Plan Standard in the 2012 Guidelines.

BUDGET

The criterion is marginally addressed and documentation is incomplete and insufficient. A summary budget is provided that identifies a funding match of 50% of the total project cost. However, it cannot be determined if the costs are reasonable as little supporting documentation is provided. No labor costs, hourly wage rates, number of hours, labor categories, or other details are provided for any of the tasks. Costs are broken down by budget category, not task, as presented in the work plan. Grant administration, environmental compliance, construction administration, and construction contingency are estimated only as percentages of the construction costs without any documentation to support these percentages. Applicant includes an estimate of \$250,000 for purchasing the basin property, but there is no basis for this estimate. The list of construction costs contains some additional detail, but it too is not well supported.

SCHEDULE

The criterion is marginally addressed and documentation is incomplete and insufficient. The schedule indicates readiness to begin construction by October 2015; however, several task durations do not appear reasonable and there is no narrative to justify the claim. For example, the schedule does not include a timeframe for land/easement acquisition. There is a "right-of-way engineering" task, but this precedes project approval. The applicant allots 80 days for acquiring 401 Certification permits. This is highly optimistic and does not take into account for the 404(b)(1) alternatives analysis that will likely be required and add substantially to the duration. Finally, in the work plan, the applicant includes tasks referencing the "plan alternative" and to "discuss the pros and cons of each alternative". The supporting documentation indicates that alternative designs were considered as part of the Calimesa Creek Master Plan but the proposed project was not among them. This suggests the project alternative has not been subject to stakeholder review, which will be required and could also substantially delay the construction start date.

MONITORING, ASSESSMENT, AND PERFORMANCE MEASURES

The criterion is marginally addressed and documentation is incomplete and insufficient. The monitoring targets are not appropriate for the benefits claimed. They more closely resemble project goals or outcomes and are not a means of tracking project performance. For example, the target for groundwater quality improvement is purely qualitative. Without a numeric target, there is no way to verify when the target is met. Although measuring tools are proposed, the methods for using these tools are not described. Therefore, it is not possible to determine if project performance will be effectively monitored. For example, it is unclear how the measurement tool and method of "City maintenance costs and photographic documentation" helps monitor the proposed target of "Safely convey storm flows for up to 100-year storm events."

TECHNICAL JUSTIFICATION

Technical justification cannot be determined due to lack of documentation that demonstrates the technical adequacy of the project and physical benefits are not well described. Applicant's claim of historical flooding or the damage/costs incurred is not well supported. A map with a 100-year inundation area is provided in Attachment 7. However, this area

does not appear to correspond with the FEMA 100-year inundation area provided in the Calimesa Creek Master Plan Appendix A. The FEMA 100-year inundation area appears to be substantially smaller. There is no data provided to demonstrate how the claimed benefit of 200 acre-feet per year (AFY) of recharge was determined. Also, it is not clear why the analysis assumes a baseline of zero current recharge. The project will place over 1,700 feet of creek underground in a concrete culvert reducing groundwater recharge for this portion of the creek. Applicant claims the project will reduce pollutants including sediment, nutrients, trash, metals, bacteria, virus, oil, grease, organics and pesticides. The technical information to justify this claim appears to be limited to information included in the Calimesa Creek Master Plan Appendix. This document is a "conceptual design report" only. It discusses the potential, general effectiveness of swales to trap particulate pollutants and of vegetation to cause microbial transformations. However, the discussion is general and does not address the specific water quality benefit claims in the application.

BENEFITS AND COST ANALYSIS

Collectively the proposal is likely to provide a high level of benefits in relationship to cost, but the quality of the analysis or clear and complete documentation is lacking.

The net present value (NPV) of costs is \$3.55 million. The expected annual damage (EAD) calculation in Table 11 appears to be in error. The corrected EAD, if there are no damages at the 1 in 8 year event, is about \$463,000, not \$268,994 as claimed. Therefore, the NPV of flood damage reduction (FDR) benefits should be over \$7 million. Applicant's claimed water supply benefits of \$925,734 are not substantiated, as it does not account for the loss of creek recharge from the placement of over 1,700 feet of concrete lined storm drain beneath the creek. Discounting this claim, total monetized FDR benefits of almost \$7 million are well in excess of the PV of costs of about \$3.55 million.

PROGRAM PREFERENCES

Applicant claims that 6 program preferences and 6 statewide priorities will be met with project implementation. However, applicant demonstrates with a high degree of certainty, and adequately documents the magnitude and breadth to which each will be achieved for only 5 of the preferences and priorities claimed. The proposal will achieve the following: (1) Include regional projects or programs; (2) Contribute to attainment of one or more of the objectives of the CALFED Bay-Delta Program; (3) Effectively integrate water management with land use planning; (4) Use and Reuse Water More Efficiently; (5) Practice Integrated Flood Management.